

File 275:IAC(SM) Computer Database(TM) 1983-1998/Nov 02
 (c) 1998 Info Access Co
 File 674:Computer News Fulltext 1989-1998/Oct W4
 (c) 1998 IDG Communications
 File 16:IAC PROMT(R) 1972-1998/Nov 02
 (c) 1998 Information Access Co.
 File 15:ABI/INFORM(R) 1971-1998/Oct 30
 (c) 1998 UMI
 File 98:General Sci Abs/Full-Text 1984-1998/Sep
 (c) 1998 The HW Wilson Co.
 File 148:IAC Trade & Industry Database 1976-1998/Nov 02
 (c) 1998 Info Access Co
 File 636:IAC Newsletter DB(TM) 1987-1998/Nov 02
 (c) 1998 Information Access Co.
 File 624:McGraw-Hill Publications 1985-1998/Oct 29
 (c) 1998 McGraw-Hill Co. Inc
 File 9:Business & Industry(R) Jul 1994-1998/Nov 02
 (c) 1998 Resp. DB Svcs.
 File 88:IAC BUSINESS A.R.T.S. 1976-1998/Nov 02
 (c) 1998 Information Access Co.
 File 47:Magazine Database(TM) 1959-1998/Nov 02
 (c) 1998 Information Access Co.
 File 370:Science 1996-1998/Sep W3
 (c) 1998 AAAS
 File 610:Business Wire 1986-1998/Nov 02
 (c) 1998 Business Wire
 File 612:Japan Economic Newswire(TM) 1984-1998/Nov 02
 (c) 1998 Kyodo News
 File 613:PR Newswire 1987-1998/Nov 02
 (c) 1998 PR Newswire Association Inc
 File 621:IAC New Prod.Annou.(R) 1985-1998/Nov 02
 (c) 1998 Information Access Co
 File 635:Business Dateline(R) 1985-1998/Oct 30
 (c) 1998 UMI
 File 484:Periodical Abstracts Plustext 1986-1998/Oct W2
 (c) 1998 UMI
 File 647:CMP Computer Fulltext 1988-1998/Oct W2
 (c) 1998 CMP

Set	Items	Description
S1	556	NCR(S) (OCCA OR OPEN() (CO() OPERATIVE OR COOPERATIVE) () COMPU- T?() ARCHITECTURE)
S2	556	S1 NOT PD=>961129
S3	29	S2/TI
?		

3/5/1 (Item 1 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01567579 SUPPLIER NUMBER: 13515334
NCR **regroups, makes plans for Cooperation. (platform for Open
Cooperative Computing Architecture)**
Booker, Ellis
Computerworld, v27, n2, p47(2)
Jan 11, 1993
ISSN: 0010-4841 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: NCR Corp executives are admitting they should have backed Unix, rather than OS/2, when they released the Cooperation software platform in 1990. Cooperation, an object-oriented, networked computing environment, is the glue behind the company's Open Cooperative Computing Architecture. The early choice of OS/2 delayed the development of a Unix server product, which is now expected in Feb or Mar 1993. The company shipped a second release of the OS/2 server software in Dec 1992 and said all future enhancements will be under Cooperation 2.1, the Unix implementation due in March. Cooperation now faces heavy competition in the groupware market, but NCR is targeting enterprisewide, mission-critical applications formerly run on mainframes. This market requires a higher price tag and poses a tougher marketing challenge.

COMPANY NAMES: NCR Corp.--Product development
DESCRIPTORS: Product Development; UNIX; Work Group Computing; Marketing Strategy; Office automation software
SIC CODES: 7372 Prepackaged software; 3571 Electronic computers; 3577 Computer peripheral equipment, not elsewhere classified
TICKER SYMBOLS: NCR
TRADE NAMES: Cooperation (Workgroup software)--Product enhancement
OPERATING PLATFORM: OS/2; Unix
FILE SEGMENT: CD File 275

3/5/2 (Item 2 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01411948 SUPPLIER NUMBER: 11470302
**Company: NCR Corp.: Architecture: OCCA (Open, Cooperative
Computing Architecture). (one of nine articles on leading vendors'
software architectures)**
Systems Integration, v24, n10, p48(2)
Oct, 1991
ISSN: 1044-4262 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: NCR Corp's Open, Cooperative Computing Architecture (OCCA) is the underlying architecture for services and products from both NRC and AT&T. The System 3000 line from NCR will be the base platform for NCR\AT&T products. System 3000 machines run Unix System V 4.0, MS-DOS and OS\2. OCCA consists of a client\server architecture, networked distribution of computing functions, open systems standards and consistent user interfaces. The architecture addresses transaction processing and information and systems management. OCCA's Open Systems Interconnection component is encompassed by the Open Networking Environment product line, which was introduced in Oct 1990. NCR's software applications include NCR Cooperation, an object-oriented, general-application integration environment which implements OCCA in multivendor systems. The Cooperation line comprises over 50 software modules, from application-development tools to products for accessing SQL databases. The interface for NCR Cooperation applications is NCR Desktop.

SPECIAL FEATURES: illustration; photograph
COMPANY NAMES: NCR Corp.--Products
DESCRIPTORS: Software Architecture; Open Systems; Standard; Client/Server Architecture; Compatible Hardware; Compatible Software; Interoperability;

Computer Industry
SIC CODES: 3571 Electronic computers; 3577 Computer peripheral
equipment, not elsewhere classified; 7372 Prepackaged software
TICKER SYMBOLS: NCR
OPERATING PLATFORM: NCR; OS\2 LAN Manager; UNIX
FILE SEGMENT: CD File 275

3/5/3 (Item 3 from file: 275)

DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01400673 SUPPLIER NUMBER: 10724117

**Massive merger task begins; users expecting AT&T to buy into strategic
directions set by NCR. (includes related article on NCR's Open,
Cooperative Computing Architecture)**

Fitzgerald, Michael
Computerworld, v25, n19, p1(2)
May 13, 1991

ISSN: 0010-4841 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: AT&T and NCR Corp executives are preparing for the massive task of coordinating the two companies' merger, with AT&T betting that a transition team made up of top managers from both sides will make it more successful than similar acquisitions in recent years. Analysts say that the merger will require enormous effort but will create a highly competitive firm if successful. Users of both AT&T and NCR products say they are not concerned because the publicity surrounding AT&T's hostile takeover attempt gave them six months to prepare. One NCR user says he expects his vendor to do business as usual provided that AT&T does not intervene in NCR's progress. Others say they want information on the actual working of the merger. One analyst expects NCR to control the deal because AT&T is supporting NCR's plans at the expense of its own prior strategies.

CAPTIONS: At a glance: AT and T and NCR financial statistics. (table)

SPECIAL FEATURES: illustration; table; photograph

COMPANY NAMES: American Telephone and Telegraph Co.--Acquisitions,
mergers, divestments; NCR Corp.--Acquisitions, mergers, divestments

DESCRIPTORS: Merger; Strategic Planning; Product Acquisition; Computer
Industry

SIC CODES: 3571 Electronic computers; 3577 Computer peripheral
equipment, not elsewhere classified

TICKER SYMBOLS: NCR; T

FILE SEGMENT: CD File 275

3/5/4 (Item 4 from file: 275)

DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01384397 SUPPLIER NUMBER: 09598087 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**NCR shows Co-operation with Intel architecture. (Co-operation office
automation software based on NCR Corp's open co-operative
computing architecture) (product announcement)**

PC User, n144, p26(1)

Oct 24, 1990

DOCUMENT TYPE: product announcement ISSN: 0263-5720 LANGUAGE:
ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 265 LINE COUNT: 00022

SPECIAL FEATURES: illustration; photograph

COMPANY NAMES: NCR Corp.--Product introduction

DESCRIPTORS: Office Automation Software; Application Development Software
; Work Group Computing; Object-Oriented Programming; GUI

SIC CODES: 7372 Prepackaged software

TICKER SYMBOLS: NCR; INTC

TRADE NAMES: Co-operation (Office automation software)--Product
introduction; AT and T NCR 3000 (Intel-compatible system)--Computer

programs
OPERATING PLATFORM: MS-DOS; OS/2; UNIX
FILE SEGMENT: CD File 275

3/5/5 (Item 5 from file: 275)

DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01359095 SUPPLIER NUMBER: 08224830 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR **ushers in era of co-operative processing. (unveils** Open,
Cooperative Computing Architecture)
Slofstra, Martin
Computing Canada, v16, n5, p1(2)
March 1, 1990
ISSN: 0319-0161 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 494 LINE COUNT: 00039

ABSTRACT: NCR Corp says its new Open Cooperative Computing Architecture (OCCA) will form the basis of its product and marketing strategy for the 1990s. OCCA promises to make enterprise computing resources transparently available at the desktop level by conforming to such industry standards as Motif, OSI, and SQL, and by supporting such operating systems as UNIX, DOS, and OS-2. OCCA's five layers are Human Interface, Application Environment, Cooperative Services, Communication Services, and Base Platform. NCR considers OCCA's combination of open systems and cooperative processing unique, and says the Cooperation software suite, which will enable OCCA implementation, will be released 2nd qtr 1990.

COMPANY NAMES: NCR Corp.--Product development
DESCRIPTORS: Cooperation; Interoperability; Functional Capabilities;
Network Architecture; Marketing Strategy
SIC CODES: 7372 Prepackaged software
TRADE NAMES: Cooperation (Workgroup software)--Product development
FILE SEGMENT: CD File 275

3/5/6 (Item 6 from file: 275)

DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01356471 SUPPLIER NUMBER: 08474448 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR, **Teradata in joint development agreement. (will develop hardware**
platform for NCR's Open, Co-operative Computing Architecture)

Frangini, Monica
Computing Canada, v16, n9, p10(1)
April 26, 1990
ISSN: 0319-0161 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 360 LINE COUNT: 00028

ABSTRACT: NCR Corp will acquire an equity interest in Teradata Corp for the purpose of jointly developing parallel processing software for business computer systems. The agreement calls for NCR to acquire 1,400,995 shares of Teradata common stock at a price of \$3.6 million. Both companies will then contribute personnel, funding and technology toward the three-year development project. The project seeks to develop a Unix computer for NCR's Open, Co-operative Computing Architecture (OCCA) that is capable of serving as a platform for future database products. While NCR will provide most of the initial funding for the project, Teradata will contribute key interconnect and scalable database technologies.

COMPANY NAMES: NCR Corp.--Product development; Teradata Corp.--Product development
DESCRIPTORS: Cooperative Agreements; Parallel Processing; Network Architecture; Product Development
SIC CODES: 3571 Electronic computers; 7372 Prepackaged software
TICKER SYMBOLS: TDAT; NCR
FILE SEGMENT: CD File 275

3/5/7 (Item 7 from file: 275)

DIALOG(R)File 275:IAC(SM) Computer Database(TM)

(c) 1998 Info Access Co. All rts. reserv.

01355611 SUPPLIER NUMBER: 08446474 (USE FORMAT 7 OR 9 FOR FULL TEXT)

NCR's open architecture may foster growth for firms. (Open Cooperative Computing architecture)

Eskow, Dennis

PC Week, v7, n19, p141(1)

May 14, 1990

ISSN: 0740-1604 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 615 LINE COUNT: 00048

ABSTRACT: NCR's Open Cooperative Computing (OCC) Architecture may encourage the growth of other firms, with its open interfaces, interoperability of hardware, operating subsystems and systems, and access to applications across networks. This new connectivity strategy lays the groundwork by supporting Unix across all platforms. At the Nucon 90 meeting of NCR users groups in Reno, NV, in May 1990, there was widespread enthusiasm about OCC. A new connectivity package from Century Analysis Inc, called CAI-Net, has helped make OCC possible. The product is a 'teamware' accessory that allows all computing operating environments except H-P's NewWave to operate on the same network, without using protocol conversion or special wiring.

COMPANY NAMES: NCR Corp.--Marketing; Century Analysis Inc.--Products

DESCRIPTORS: Marketing Strategy; Open Systems; Operating Environments; Networks; Connectivity; Network Architecture

SIC CODES: 7372 Prepackaged software

TICKER SYMBOLS: NCR

TRADE NAMES: CAI-Net (Network management software)--Usage

FILE SEGMENT: CD File 275

3/5/8 (Item 8 from file: 275)

DIALOG(R)File 275:IAC(SM) Computer Database(TM)

(c) 1998 Info Access Co. All rts. reserv.

01346849 SUPPLIER NUMBER: 08177938 (USE FORMAT 7 OR 9 FOR FULL TEXT)

NCR plan wins cautious praise. (industry reaction to NCR Corp's announcement of Open Cooperative Computing Architecture strategy)

Musich, Paula

PC Week, v7, n8, p46(1)

Feb 26, 1990

ISSN: 0740-1604 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 423 LINE COUNT: 00036

COMPANY NAMES: NCR Corp.--Planning

DESCRIPTORS: Strategic Planning; Industry Analysis; Client/Server Architecture; Connectivity; Open Systems; Computer Industry

SIC CODES: 3571 Electronic computers

TICKER SYMBOLS: NCR

FILE SEGMENT: CD File 275

3/5/9 (Item 9 from file: 275)

DIALOG(R)File 275:IAC(SM) Computer Database(TM)

(c) 1998 Info Access Co. All rts. reserv.

01331842 SUPPLIER NUMBER: 08173464

NCR bowls down SAA alley. (Systems Application Architecture) (Open Cooperative Computing Architecture)

Booker, Ellis

Computerworld, v24, n8, p8(1)

Feb 19, 1990

ISSN: 0010-4841 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: NCR Corp is introducing a cooperative computing architecture, called Open Cooperative Computing Architecture (OCCA), and entering territory now held by IBM and its System Application Architecture (SAA). OCCA will not be dependent on NCR hardware, but will be based on open standards and interfaces. The architecture includes a human interface, an applications development environment, a cooperative services layer, a communications services layer, and a base platform that includes operating systems, hardware and physical network. The OCCA, like IBM's SAA, is based on a client/server model.

SPECIAL FEATURES: illustration; photograph
COMPANY NAMES: NCR Corp.--Product development
DESCRIPTORS: Product Development; Client/Server Architecture; Open Systems; Connectivity; Computer Industry
SIC CODES: 3571 Electronic computers
TICKER SYMBOLS: NCR
FILE SEGMENT: CD File 275

3/5/10 (Item 10 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01328245 SUPPLIER NUMBER: 08172064
NCR architects net applications strategy; OCCA will help developers build client/server programs linking workstations to range of servers. (Open Cooperative Computing Architecture) (product announcement)
Brown, Jim
Network World, v7, n8, p1(2)
Feb 19, 1990
DOCUMENT TYPE: product announcement ISSN: 0887-7661 LANGUAGE:
ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: NCR Corp introduces the Open Cooperative Computing Architecture (OCCA), a program development architecture to aid users in writing client/server programs for linking workstations and servers. OCCA will allow client workstations to access group servers or use them as gateways to establish connections with processors in other networks. The program development software, Cooperation, is the architecture's critical component. An OCCA applications' client portion will work in token-ring, Ethernet or AT&T Starlan local area network environments. Clients are able to communicate with Unix-based work group servers running network operating systems such as LAN Manager or LAN Manager/X. Cooperation costs from \$30,000 to \$90,000 for a 16-user license and from \$90,000 to \$180,000 for a 64-user license.

COMPANY NAMES: NCR Corp.--Product introduction
DESCRIPTORS: Application Development Software; Client/Server Architecture ; Open Systems; Product Introduction
SIC CODES: 7372 Prepackaged software
TICKER SYMBOLS: NCR
TRADE NAMES: Cooperation (Workgroup software)--Product introduction
OPERATING PLATFORM: MS-DOS; OS/2; Unix
FILE SEGMENT: CD File 275

3/5/11 (Item 1 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)
(c) 1998 Information Access Co. All rts. reserv.

02592719
COMPANY: NCR ARCHITECTURE: OCCA (Open, Cooperative Computing Architecture)
NCR: Its Open, Cooperative Computing Architecture to use new technologies
Systems Integration June 00, 1990 p. 38
ISSN: 0364-9342

NCR's Open, Cooperative Computing Architecture (OCCA) will eventually

support integrated-network management, object-management, image processing, and multimedia access. The company is developing applications customized for OCCA. Servers that work under OCCA include Unix-based midrange computers, and Unix- and OS/2-based PCs. Clients that work under OCCA include OS/2-, DOS-, and Unix-based PCs. Network protocols include IBM's SNA and 3270, TCP/IP, OSI, and DEC VT100/200 emulations. User interfaces include Microsoft Windows, NewWave, Motif, Presentation Manager, and NCR's Desktop. Services supplied include application, information, network delivery, system support, and system management.

COMPANY:

*NCR

PRODUCT: *Computers & Auxiliary Equip (3573000)

EVENT: *Planning & Information (22)

COUNTRY: *United States (1USA)

3/5/12 (Item 2 from file: 16)

DIALOG(R)File 16:IAC PROMT(R)

(c) 1998 Information Access Co. All rts. reserv.

02483465

NCR RELEASES ARCHITECTURE BASE FOR FUTURE MODEL OF COMPUTING -- OPEN,
COOPERATIVE COMPUTING ARCHITECTURE --
PR Newswire February 12, 1990 p. 1

NCR Corporation (NYSE: NCR) today released its architecture for the next era of computing. NCR's Open, Cooperative Computing Architecture (OCCA), based on an open clientserver model, provides customers with a bridge to future technologies while protecting their information system investments. "OCCA is the foundation for NCR's vision of the future of computing," said Gilbert P. Williamson, NCR president, "which is to make available -- transparently -- the computing resources of an entire enterprise, right at the user's desktop." Open, Cooperative Computing Architecture is composed of three major elements: -- The structure, which defines the logical relationship of the various system components; -- The interfaces, which define the connections of the components; -- And the rules, which define how the components interact with each other. OCCA provides a blueprint to customers for making long-term system decisions. It also assists third-party software developers and system integrators to create new products for a truly open, cooperative computing environment. OCCA Structure The five layers of NCR's OCCA structure include the: -- Human Interface Layer, which provides a consistent and intuitive graphical user interface across multiple applications and operating systems; -- Application Environment Layer which offers services for integrating existing applications and developing new ones; -- Cooperative Services Layer, which serves two purposes: One, to support the distribution of applications and information across the network. Two, to provide a secure, reliable and well-managed cooperative environment; -- Communication Services Layer, which facilitates the movement of information across local area networks and wide area networks. -- Base Platform Layer, which contains the operating systems (UNIX, DOS and OS/2), hardware and the physical network. Open Interfaces The second major element of NCR's Open, Cooperative Computing Architecture is the use of open interfaces, based on industry standards. This allows systems from many vendors to interoperate, and frees customers to choose the best technology for their needs based on cost and functionality.

Full text available on PTS New Product Announcements.

COMPANY:

*NCR

PRODUCT: *Office & Computing Machines (3570000)

EVENT: *Services Data (36)

COUNTRY: *United States (1USA)

3/5/13 (Item 1 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

06351274 SUPPLIER NUMBER: 13515334

NCR **regroups, makes plans for Cooperation.** (platform for Open
Cooperative Computing Architecture)

Booker, Ellis

Computerworld, v27, n2, p47(2)

Jan 11, 1993

ISSN: 0010-4841

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

ABSTRACT: NCR Corp executives are admitting they should have backed Unix, rather than OS/2, when they released the Cooperation software platform in 1990. Cooperation, an object-oriented, networked computing environment, is the glue behind the company's Open Cooperative Computing Architecture. The early choice of OS/2 delayed the development of a Unix server product, which is now expected in Feb or Mar 1993. The company shipped a second release of the OS/2 server software in Dec 1992 and said all future enhancements will be under Cooperation 2.1, the Unix implementation due in March. Cooperation now faces heavy competition in the groupware market, but NCR is targeting enterprisewide, mission-critical applications formerly run on mainframes. This market requires a higher price tag and poses a tougher marketing challenge.

COMPANY NAMES: NCR Corp.--Product development

INDUSTRY CODES/NAMES: CMPT Computers and Office Automation

DESCRIPTORS: Computer software industry--Product development; Office
automation software--Product development

SIC CODES: 7372 Prepackaged software; 3571 Electronic computers; 3577
Computer peripheral equipment, not elsewhere classified

TICKER SYMBOLS: NCR

TRADE NAMES: Cooperation (Workgroup software)--Product enhancement

OPERATING PLATFORM: OS/2; Unix

FILE SEGMENT: CD File 275

3/5/14 (Item 2 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

05389907 SUPPLIER NUMBER: 11470302

Company: NCR Corp.: **Architecture:** OCCA (Open, Cooperative
Computing Architecture). (one of nine articles on leading vendors'
software architectures)

Systems Integration, v24, n10, p48(2)

Oct, 1991

ISSN: 1044-4262

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

ABSTRACT: NCR Corp's Open, Cooperative Computing Architecture (OCCA) is the underlying architecture for services and products from both NCR and AT&T. The System 3000 line from NCR will be the base platform for NCR\AT&T products. System 3000 machines run Unix System V 4.0, MS-DOS and OS\2. OCCA consists of a client\server architecture, networked distribution of computing functions, open systems standards and consistent user interfaces. The architecture addresses transaction processing and information and systems management. OCCA's Open Systems Interconnection component is encompassed by the Open Networking Environment product line, which was introduced in Oct 1990. NCR's software applications include NCR Cooperation, an object-oriented, general-application integration environment which implements OCCA in multivendor systems. The Cooperation line comprises over 50 software modules, from application-development tools to products for accessing SQL databases. The interface for NCR Cooperation applications is NCR Desktop.

SPECIAL FEATURES: illustration; photograph

COMPANY NAMES: NCR Corp.--Products

INDUSTRY CODES/NAMES: CMPT Computers and Office Automation

DESCRIPTORS: Interoperability--Products; Computer industry--Standards;
Software--Design and construction; Computer software industry--Standards
SIC CODES: 3571 Electronic computers; 3577 Computer peripheral
equipment, not elsewhere classified; 7372 Prepackaged software
TICKER SYMBOLS: NCR
OPERATING PLATFORM: NCR; OS\2 LAN Manager; UNIX
FILE SEGMENT: CD File 275

3/5/15 (Item 3 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04922278 SUPPLIER NUMBER: 10724117

**Massive merger task begins; users expecting AT&T to buy into strategic
directions set by NCR. (includes related article on NCR's Open,
Cooperative Computing Architecture)**

Fitzgerald, Michael

Computerworld, v25, n19, p1(2)

May 13, 1991

ISSN: 0010-4841

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

ABSTRACT: AT&T and NCR Corp executives are preparing for the massive task of coordinating the two companies' merger, with AT&T betting that a transition team made up of top managers from both sides will make it more successful than similar acquisitions in recent years. Analysts say that the merger will require enormous effort but will create a highly competitive firm if successful. Users of both AT&T and NCR products say they are not concerned because the publicity surrounding AT&T's hostile takeover attempt gave them six months to prepare. One NCR user says he expects his vendor to do business as usual provided that AT&T does not intervene in NCR's progress. Others say they want information on the actual working of the merger. One analyst expects NCR to control the deal because AT&T is supporting NCR's plans at the expense of its own prior strategies.

CAPTIONS: At a glance: AT and T and NCR financial statistics. (table)

SPECIAL FEATURES: illustration; table; photograph

COMPANY NAMES: American Telephone and Telegraph Co.--Acquisitions,
mergers, divestments; NCR Corp.--Acquisitions, mergers, divestments

INDUSTRY CODES/NAMES: CMPT Computers and Office Automation

DESCRIPTORS: Computer industry--Acquisitions, mergers, divestments

SIC CODES: 3571 Electronic computers; 3577 Computer peripheral
equipment, not elsewhere classified

TICKER SYMBOLS: NCR; T

FILE SEGMENT: CD File 275

3/5/16 (Item 4 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04871613 SUPPLIER NUMBER: 09598087 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**NCR shows Co-operation with Intel architecture. (Co-operation office
automation software based on NCR Corp's open co-operative
computing architecture) (product announcement)**

PC User, n144, p26(1)

Oct 24, 1990

DOCUMENT TYPE: product announcement

ISSN: 0263-5720

LANGUAGE:

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 265 LINE COUNT: 00022

SPECIAL FEATURES: illustration; photograph

COMPANY NAMES: NCR Corp.--Product introduction

INDUSTRY CODES/NAMES: CMPT Computers and Office Automation; INTL
Business, International

SIC CODES: 7372 Prepackaged software

TICKER SYMBOLS: NCR; INTC

TRADE NAMES: Co-operation (Office automation software)--Product

introduction; AT and T NCR 3000 (Intel-compatible system)--Computer programs
OPERATING PLATFORM: MS-DOS; OS/2; UNIX
FILE SEGMENT: CD File 275

3/5/17 (Item 5 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04587783 SUPPLIER NUMBER: 08224830 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR **ushers in era of co-operative processing. (unveils Open, Cooperative Computing Architecture)**
Slofstra, Martin
Computing Canada, v16, n5, p1(2)
March 1, 1990
ISSN: 0319-0161 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 494 LINE COUNT: 00039

ABSTRACT: NCR Corp says its new Open Cooperative Computing Architecture (OCCA) will form the basis of its product and marketing strategy for the 1990s. OCCA promises to make enterprise computing resources transparently available at the desktop level by conforming to such industry standards as Motif, OSI, and SQL, and by supporting such operating systems as UNIX, DOS, and OS-2. OCCA's five layers are Human Interface, Application Environment, Cooperative Services, Communication Services, and Base Platform. NCR considers OCCA's combination of open systems and cooperative processing unique, and says the Cooperation software suite, which will enable OCCA implementation, will be released 2nd qtr 1990.

COMPANY NAMES: NCR Corp.--Product development
INDUSTRY CODES/NAMES: CMPT Computers and Office Automation; INTL Business, International
SIC CODES: 7372 Prepackaged software
TRADE NAMES: Cooperation (Workgroup software)--Product development
FILE SEGMENT: CD File 275

3/5/18 (Item 6 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04572188 SUPPLIER NUMBER: 08474448 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR, **Teradata in joint development agreement. (will develop hardware platform for NCR's Open, Co-operative Computing Architecture)**

Frangini, Monica
Computing Canada, v16, n9, p10(1)
April 26, 1990
ISSN: 0319-0161 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 360 LINE COUNT: 00028

ABSTRACT: NCR Corp will acquire an equity interest in Teradata Corp for the purpose of jointly developing parallel processing software for business computer systems. The agreement calls for NCR to acquire 1,400,995 shares of Teradata common stock at a price of \$3.6 million. Both companies will then contribute personnel, funding and technology toward the three-year development project. The project seeks to develop a Unix computer for NCR's Open, Co-operative Computing Architecture (OCCA) that is capable of serving as a platform for future database products. While NCR will provide most of the initial funding for the project, Teradata will contribute key interconnect and scalable database technologies.

COMPANY NAMES: NCR Corp.--Product development; Teradata Corp.--Product development
INDUSTRY CODES/NAMES: CMPT Computers and Office Automation; INTL Business, International
SIC CODES: 3571 Electronic computers; 7372 Prepackaged software
TICKER SYMBOLS: TDAT; NCR

FILE SEGMENT: CD File 275

3/5/19 (Item 7 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04566983 SUPPLIER NUMBER: 08446474 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR's open architecture may foster growth for firms. (Open Cooperative
Computing architecture)
Eskow, Dennis
PC Week, v7, n19, p141(1)
May 14, 1990
ISSN: 0740-1604 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 615 LINE COUNT: 00048

ABSTRACT: NCR's Open Cooperative Computing (OCC) Architecture may encourage the growth of other firms, with its open interfaces, interoperability of hardware, operating subsystems and systems, and access to applications across networks. This new connectivity strategy lays the groundwork by supporting Unix across all platforms. At the Nucon 90 meeting of NCR users groups in Reno, NV, in May 1990, there was widespread enthusiasm about OCC. A new connectivity package from Century Analysis Inc, called CAI-Net, has helped make OCC possible. The product is a 'teamware' accessory that allows all computing operating environments except H-P's NewWave to operate on the same network, without using protocol conversion or special wiring.

COMPANY NAMES: NCR Corp.--Marketing; Century Analysis Inc.--Products
INDUSTRY CODES/NAMES: CMPT Computers and Office Automation
DESCRIPTORS: Network architecture--Marketing; Computer networks--
Equipment and supplies
SIC CODES: 7372 Prepackaged software
TICKER SYMBOLS: NCR
TRADE NAMES: CAI-Net (Network management software)--Usage
FILE SEGMENT: CD File 275

3/5/20 (Item 8 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04505493 SUPPLIER NUMBER: 08177938 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR plan wins cautious praise. (industry reaction to NCR Corp's
announcement of Open Cooperative Computing Architecture strategy)
Musich, Paula
PC Week, v7, n8, p46(1)
Feb 26, 1990
ISSN: 0740-1604 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 423 LINE COUNT: 00036

COMPANY NAMES: NCR Corp.--Planning
INDUSTRY CODES/NAMES: CMPT Computers and Office Automation
DESCRIPTORS: Computer industry--Planning
SIC CODES: 3571 Electronic computers
TICKER SYMBOLS: NCR
FILE SEGMENT: CD File 275

3/5/21 (Item 9 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04498334 SUPPLIER NUMBER: 08149752 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR releases architecture base for future model of computing - Open,
Cooperative Computing Architecture.
PR Newswire, 0213NY076A
Feb 13, 1990
LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 1045 LINE COUNT: 00095

COMPANY NAMES: NCR Corp.--Marketing
INDUSTRY CODES/NAMES: BUS Business, General
DESCRIPTORS: Computer industry--Marketing; Computer architecture--
Marketing
SIC CODES: 3571 Electronic computers
TICKER SYMBOLS: NCR
FILE SEGMENT: NW File 649

3/5/22 (Item 10 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04497681 SUPPLIER NUMBER: 08145110 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR releases architecture base for future model of computing - Open,
Cooperative Computing Architecture.
PR Newswire; 0212NY076A
Feb 12, 1990
LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1042 LINE COUNT: 00095

COMPANY NAMES: NCR Corp.--Marketing
INDUSTRY CODES/NAMES: BUS Business, General
DESCRIPTORS: Computer industry--Marketing; Computer architecture--
Marketing
SIC CODES: 3571 Electronic computers
TICKER SYMBOLS: NCR
FILE SEGMENT: NW File 649

3/5/23 (Item 11 from file: 148)

DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04473076 SUPPLIER NUMBER: 08172064
NCR architects net applications strategy; OCCA will help developers
build client/server programs linking workstations to range of servers. (
Open Cooperative Computing Architecture) (product announcement)
Brown, Jim
Network World, v7, n8, p1(2)
Feb 19, 1990
DOCUMENT TYPE: product announcement ISSN: 0887-7661 LANGUAGE:
ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: NCR Corp introduces the Open Cooperative Computing Architecture (OCCA), a program development architecture to aid users in writing client/server programs for linking workstations and servers. OCCA will allow client workstations to access group servers or use them as gateways to establish connections with processors in other networks. The program development software, Cooperation, is the architecture's critical component. An OCCA applications' client portion will work in token-ring, Ethernet or AT&T Starlan local area network environments. Clients are able to communicate with Unix-based work group servers running network operating systems such as LAN Manager or LAN Manager/X. Cooperation costs from \$30,000 to \$90,000 for a 16-user license and from \$90,000 to \$180,000 for a 64-user license.

COMPANY NAMES: NCR Corp.--Product introduction
INDUSTRY CODES/NAMES: CMPT Computers and Office Automation
SIC CODES: 7372 Prepackaged software
TICKER SYMBOLS: NCR
TRADE NAMES: Cooperation (Workgroup software)--Product introduction
OPERATING PLATFORM: MS-DOS; OS/2; Unix
FILE SEGMENT: CD File 275

3/5/24 (Item 12 from file: 148)
DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1998 Info Access Co. All rts. reserv.

04370725 SUPPLIER NUMBER: 08173464
NCR bowls down SAA alley. (Systems Application Architecture) (Open
Cooperative Computing Architecture)
Booker, Ellis
Computerworld, v24, n8, p8(1)
Feb 19, 1990
ISSN: 0010-4841 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: NCR Corp is introducing a cooperative computing architecture, called Open Cooperative Computing Architecture (OCCA), and entering territory now held by IBM and its System Application Architecture (SAA). OCCA will not be dependent on NCR hardware, but will be based on open standards and interfaces. The architecture includes a human interface, an applications development environment, a cooperative services layer, a communications services layer, and a base platform that includes operating systems, hardware and physical network. The OCCA, like IBM's SAA, is based on a client/server model.

SPECIAL FEATURES: illustration; photograph
COMPANY NAMES: NCR Corp.--Product development
INDUSTRY CODES/NAMES: CMPT Computers and Office Automation
DESCRIPTORS: Computer industry--Product development
SIC CODES: 3571 Electronic computers
TICKER SYMBOLS: NCR
FILE SEGMENT: CD File 275

3/5/25 (Item 1 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1998 Information Access Co. All rts. reserv.

03391649 SUPPLIER NUMBER: 08446474 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR's open architecture may foster growth for firms. (Open Cooperative
Computing architecture)
Eskow, Dennis
PC Week, v7, n19, p141(1)
May 14, 1990
ISSN: 0740-1604 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 615 LINE COUNT: 00048

ABSTRACT: NCR's Open Cooperative Computing (OCC) Architecture may encourage the growth of other firms, with its open interfaces, interoperability of hardware, operating subsystems and systems, and access to applications across networks. This new connectivity strategy lays the groundwork by supporting Unix across all platforms. At the Nucon 90 meeting of NCR users groups in Reno, NV, in May 1990, there was widespread enthusiasm about OCC. A new connectivity package from Century Analysis Inc, called CAI-Net, has helped make OCC possible. The product is a 'teamware' accessory that allows all computing operating environments except H-P's NewWave to operate on the same network, without using protocol conversion or special wiring.

COMPANY NAMES: NCR Corp.--Marketing; Century Analysis Inc.--Products
DESCRIPTORS: Network architecture--Marketing; Computer networks--
Equipment and supplies
SIC CODES: 7372 Prepackaged software
TICKER SYMBOLS: NCR
TRADE NAMES: CAI-Net (Network management software)--Usage
FILE SEGMENT: CD File 275

3/5/26 (Item 2 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1998 Information Access Co. All rts. reserv.

03381213 SUPPLIER NUMBER: 08177938 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR plan wins cautious praise. (industry reaction to NCR Corp's
announcement of Open Cooperative Computing Architecture strategy)
Musich, Paula
PC Week, v7, n8, p46(1)
Feb 26, 1990
ISSN: 0740-1604 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 423 LINE COUNT: 00036

COMPANY NAMES: NCR Corp.--Planning
DESCRIPTORS: Computer industry--Planning
SIC CODES: 3571 Electronic computers
TICKER SYMBOLS: NCR
FILE SEGMENT: CD File 275

3/5/27 (Item 1 from file: 613)
DIALOG(R) File 613:PR Newswire
(c) 1998 PR Newswire Association Inc. All rts. reserv.

0242609 NY076A
NCR RELEASES ARCHITECTURE BASE FOR FUTURE MODEL OF COMPUTING -- OPEN,
COOPERATIVE COMPUTING ARCHITECTURE --

DATE: February 12, 1990 16:18 EST WORD COUNT: 959

NEW YORK, Feb. 12 /PRNewswire/ -- NCR Corporation (NYSE: NCR) today released its architecture for the next era of computing. NCR's Open, Cooperative Computing Architecture (OCCA), based on an open client-server model, provides customers with a bridge to future technologies while protecting their information system investments.

"OCCA is the foundation for NCR's vision of the future of computing," said Gilbert P. Williamson, NCR president, "which is to make available -- transparently -- the computing resources of an entire enterprise, right at the user's desktop."

Open, Cooperative Computing Architecture is composed of three major elements:

- The structure, which defines the logical relationship of the various system components;
- The interfaces, which define the connections of the components;
- And the rules, which define how the components interact with each other.

OCCA provides a blueprint to customers for making long-term system decisions. It also assists third-party software developers and system integrators to create new products for a truly open, cooperative computing environment.

OCCA Structure

The five layers of NCR's OCCA structure include the:

- Human Interface Layer, which provides a consistent and intuitive graphical user interface across multiple applications and operating systems;
- Application Environment Layer, which offers services for integrating existing applications and developing new ones;
- Cooperative Services Layer, which serves two purposes:
One, to support the distribution of applications and information across the network. Two, to provide a secure, reliable and well-managed cooperative environment;

- Communication Services Layer, which facilitates the movement of information across local area networks and wide area networks.
- Base Platform Layer, which contains the operating systems (UNIX, DOS and OS/2), hardware and the physical network.

Open Interfaces

The second major element of NCR's Open, Cooperative Computing Architecture is the use of open interfaces, based on industry standards. This allows systems from many vendors to interoperate, and frees customers to choose the best technology for their needs based on cost and functionality.

"The most important interfaces are those that provide the ways an application connects to the user, to the network and to the data bases," said Williamson. "For example, our architecture supports MOTIF, OSI and SQL."

Client-Server Model Key to OCCA

The client-server model makes transparent, enterprise-wide computing practical and manageable. NCR has nearly five years' experience in designing and installing client-server solutions for leading financial institutions.

NCR's OCCA client-server model is unlike two other current computing models: a conventional mainframe connected to character-based terminals, or a file-server system based on a Local Area Network (LAN). In the former, all the applications, data and human-interface logic reside on the mainframe. In the latter, data is located on the file server, while applications and human-interface logic reside at the workstation.

Client-Server Advantages

In NCR's client-server model, the application is split between client and server. The front end of the application and the human interface logic are located at the workstation, while the back end of the application and the data are located on the server.

"This separation has several advantages," noted Williamson. "It makes maintenance of applications and data easier, it improves access to both applications and data, and it lets processing tasks be performed at the most effective location on the network."

NCR's client-server model for Open, Cooperative Computing Architecture has two other distinguishing characteristics:

- The use of open Application Programming Interfaces which will maximize the availability of third-party software and make application development easier and faster.
- A structure that encompasses more than workgroup computing to allow users to "reach through the enterprise" for relevant information.

As to how OCCA will actually work at the user level, Williamson cited an example of a current office worker having to use a number of terminals to query separate data bases throughout a company. The resulting information then has to be manually combined for use.

"With Open, Cooperative Computing, the user makes a single request to the system," Williamson said. "The user's local server will access the required data located in remote servers throughout the enterprise and provide to the user data already combined into useful information."
OCCA Coexistence

In today's environment, Open, Cooperative Computing Architecture enables a user to have windows to multiple processors in the enterprise. For instance, a user can have a window to a host processor running a

mainframe application, a window to a UNIX server running a UNIX application, and windows to both DOS and OS/2 applications running cooperatively on the workstation.

Among customer advantages of NCR's Open, Cooperative Computing Architecture are the following:

- Lower hardware costs, due to the use of microprocessor technology versus conventional mainframe technology, along with increased vendor competition in open environments;
- Reduced communications costs, due to lower network use as less information is transferred to the workstation;
- Faster application development, through the use of the client-server model in combination with an integrated application-development tool set, standard interfaces and relational data base techniques;
- Increased user productivity, through object-oriented, graphical user interfaces;
- And heightened organizational effectiveness and flexibility, through transparent access to applications and information across the enterprise;

The Next Step

"NCR is providing an architecture that gives users a bridge to the future," Williamson said. "OCCA will allow businesses to take advantages of advances in hardware and software, while protecting their current IS investments.

"We are also providing the tools that will help our customers answer the question: 'What is my next step?'"

As for customers of NCR's proprietary systems, Williamson said NCR will continue to invest in improvements of its I and V series products, while integrating OCC features and developing a non-disruptive migration strategy to open systems.

Based in Dayton, Ohio, NCR Corporation develops, manufactures, markets and supports business information systems for worldwide markets.

CONTACT: Robert Farkas of NCR, 513-445-2078

COMPANY NAME: NCR CORPORATION
TICKER SYMBOL: NCR (NYS)
PRODUCT: COMPUTER, ELECTRONICS (CPR)
DESCRIPTORS: NEW PRODUCTS & SERVICES (PDT)
STATE: OHIO (OH)
SECTION HEADING: BUSINESS; TECHNOLOGY

3/5/28 (Item 2 from file: 613)
DIALOG(R) File 613:PR Newswire
(c) 1998 PR Newswire Association Inc. All rts. reserv.

0242206 NY076A
NCR RELEASES ARCHITECTURE BASE FOR FUTURE MODEL OF COMPUTING -- OPEN,
COOPERATIVE COMPUTING ARCHITECTURE --

DATE: February 12, 1990 16:04 E.T. WORD COUNT: 959

NEW YORK, Feb. 12 /PRNewswire/ -- NCR Corporation (NYSE: NCR) today released its architecture for the next era of computing. NCR's Open, Cooperative Computing Architecture (OCCA), based on an open client-server model, provides customers with a bridge to future technologies while protecting their information system investments.

"OCCA is the foundation for NCR's vision of the future of computing," said Gilbert P. Williamson, NCR president, "which is to make available -- transparently -- the computing resources of an entire enterprise, right at the user's desktop."

Open, Cooperative Computing Architecture is composed of three major elements:

- The structure, which defines the logical relationship of the various system components;
- The interfaces, which define the connections of the components;
- And the rules, which define how the components interact with each other.

OCCA provides a blueprint to customers for making long-term system decisions. It also assists third-party software developers and system integrators to create new products for a truly open, cooperative computing environment.

OCCA Structure

The five layers of NCR's OCCA structure include the:

- Human Interface Layer, which provides a consistent and intuitive graphical user interface across multiple applications and operating systems;
- Application Environment Layer, which offers services for integrating existing applications and developing new ones;
- Cooperative Services Layer, which serves two purposes: One, to support the distribution of applications and information across the network. Two, to provide a secure, reliable and well-managed cooperative environment;
- Communication Services Layer, which facilitates the movement of information across local area networks and wide area networks.
- Base Platform Layer, which contains the operating systems (UNIX, DOS and OS/2), hardware and the physical network.

Open Interfaces

The second major element of NCR's Open, Cooperative Computing Architecture is the use of open interfaces, based on industry standards. This allows systems from many vendors to interoperate, and frees customers to choose the best technology for their needs based on cost and functionality.

"The most important interfaces are those that provide the ways an application connects to the user, to the network and to the data bases," said Williamson. "For example, our architecture supports MOTIF, OSI and SQL."

Client-Server Model Key to OCCA

The client-server model makes transparent, enterprise-wide computing practical and manageable. NCR has nearly five years' experience in designing and installing client-server solutions for leading financial institutions.

NCR's OCCA client-server model is unlike two other current computing models: a conventional mainframe connected to character-based terminals, or a file-server system based on a Local Area Network (LAN). In the former, all the applications, data and human-interface logic reside on the mainframe. In the latter, data is located on the file server, while applications and human-interface logic reside at the

. workstation.

Client-Server Advantages

In NCR's client-server model, the application is split between client and server. The front end of the application and the human interface logic are located at the workstation, while the back end of the application and the data are located on the server.

"This separation has several advantages," noted Williamson. "It makes maintenance of applications and data easier, it improves access to both applications and data, and it lets processing tasks be performed at the most effective location on the network."

NCR's client-server model for Open, Cooperative Computing Architecture has two other distinguishing characteristics:

- The use of open Application Programming Interfaces which will maximize the availability of third-party software and make application development easier and faster.
- A structure that encompasses more than workgroup computing to allow users to "reach through the enterprise" for relevant information.

As to how OCCA will actually work at the user level, Williamson cited an example of a current office worker having to use a number of terminals to query separate data bases throughout a company. The resulting information then has to be manually combined for use.

"With Open, Cooperative Computing, the user makes a single request to the system," Williamson said. "The user's local server will access the required data located in remote servers throughout the enterprise and provide to the user data already combined into useful information."

OCCA Coexistence

In today's environment, Open, Cooperative Computing Architecture enables a user to have windows to multiple processors in the enterprise. For instance, a user can have a window to a host processor running a mainframe application, a window to a UNIX server running a UNIX application, and windows to both DOS and OS/2 applications running cooperatively on the workstation.

Among customer advantages of NCR's Open, Cooperative Computing Architecture are the following:

- Lower hardware costs, due to the use of microprocessor technology versus conventional mainframe technology, along with increased vendor competition in open environments;
- Reduced communications costs, due to lower network use as less information is transferred to the workstation;
- Faster application development, through the use of the client-server model in combination with an integrated application-development tool set, standard interfaces and relational data base techniques;
- Increased user productivity, through object-oriented, graphical user interfaces;
- And heightened organizational effectiveness and flexibility, through transparent access to applications and information across the enterprise;

The Next Step

"NCR is providing an architecture that gives users a bridge to the

future," Williamson said. "OCCA will allow businesses to take advantages of advances in hardware and software, while protecting their current IS investments.

"We are also providing the tools that will help our customers answer the question: 'What is my next step?'"

As for customers of NCR's proprietary systems, Williamson said NCR will continue to invest in improvements of its I and V series products, while integrating OCC features and developing a non-disruptive migration strategy to open systems.

Based in Dayton, Ohio, NCR Corporation develops, manufactures, markets and supports business information systems for worldwide markets.

CONTACT: Robert Farkas of NCR, 513-445-2078

COMPANY NAME: NCR CORPORATION
TICKER SYMBOL: NCR (NYS)
PRODUCT: COMPUTER, ELECTRONICS (CPR)
DESCRIPTORS: NEW PRODUCTS & SERVICES (PDT)
STATE: OHIO (OH)
SECTION HEADING: BUSINESS; TECHNOLOGY

3/5/29 (Item 1 from file: 621)
DIALOG(R)File 621:IAC New Prod.Annou.(R)
(c) 1998 Information Access Co. All rts. reserv.

00251407

00251407

NCR RELEASES ARCHITECTURE BASE FOR FUTURE MODEL OF COMPUTING -- OPEN,
COOPERATIVE COMPUTING ARCHITECTURE --

PR Newswire

DATELINE: NEW YORK, NY February 12, 1990 WORD COUNT: 1007

NCR RELEASES ARCHITECTURE BASE FOR FUTURE MODEL OF COMPUTING
-- OPEN, COOPERATIVE COMPUTING ARCHITECTURE --
NEW YORK, Feb. 12 /PRNewswire/ -- NCR Corporation (NYSE: NCR) today released its architecture for the next era of computing. NCR's Open, Cooperative Computing Architecture (OCCA), based on an open clientserver model, provides customers with a bridge to future technologies while protecting their information system investments. "OCCA is the foundation for NCR's vision of the future of computing," said Gilbert P. Williamson, NCR president, "which is to make available -- transparently -- the computing resources of an entire enterprise, right at the user's desktop." Open, Cooperative Computing Architecture is composed of three major elements:
-- The structure, which defines the logical relationship of the various system components;
-- The interfaces, which define the connections of the components;
-- And the rules, which define how the components interact with each other.
OCCA provides a blueprint to customers for making long-term system decisions. It also assists third-party software developers and system integrators to create new products for a truly open, cooperative computing environment.
OCCA Structure
The five layers of NCR's OCCA structure include the:
-- Human Interface Layer, which provides a consistent and intuitive graphical user interface across multiple applications and operating systems;
-- Application Environment Layer which offers services for integrating existing applications and developing new ones;
-- Cooperative Services Layer, which serves two purposes: One, to support the distribution of applications and information across the